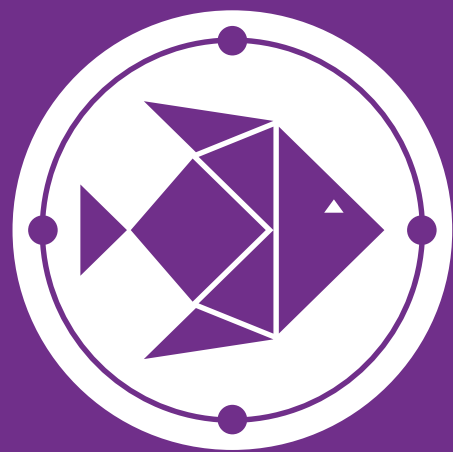




flustix
RETHINK PLASTICS

PFAS WHITEPAPER

WHY INDEPENDENT CERTIFICATION IS BECOMING THE NEW MARKET STANDARD

**From supplier declarations to
certified product evidence**

Independent third-party certification providing substantiated PFAS evidence, regulatory confidence and credible product communication.

10.09.2026

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Understanding PFAS

Your quick reference guide

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EXECUTIVE SUMMARY

PFAS: A MAJOR CHEMICAL CHALLENGE FOR THE TEXTILE INDUSTRY

Driven by evolving European legislation, increasing retailer requirements and growing consumer awareness, textile manufacturers are under increasing pressure to eliminate PFAS from their products while providing independently certified evidence to support PFAS-Free claims.

A recent independent investigation by Deutsche Umwelthilfe (DUH) demonstrates why this issue deserves immediate attention. Laboratory testing identified multiple exceedances of European PFAS restrictions in textile products purchased through one of the world's largest ultra-fast fashion platforms.

Although the investigation focuses on a single retailer, its findings reflect a much broader challenge for the textile industry.

Global textile supply chains are increasingly complex, making it difficult for manufacturers, brand owners and retailers to maintain complete visibility of every raw material, processing aid, coating or chemical treatment used upstream.

As a result, an evidence gap may arise between supplier documentation and the actual chemical status of the product placed on the market.

Closing this gap through independently certified product-level evidence is becoming increasingly important for regulatory compliance, customer confidence, procurement decisions and long-term market access.



Supplier Documentation

Declarations and SDS confirm intended chemical status.



Verification Gap

Differences can exist between documentation and the actual product.



Actual Product Status

Independent testing provides product-level evidence for certification.

THE SHEIN INVESTIGATION

The SHEIN Investigation is About More Than SHEIN

The DUH investigation attracted considerable attention because it examined products from one of the world's largest ultra-fast fashion platforms. However, the report is not simply about one retailer.



It raises broader questions regarding chemical management within global textile supply chains, the effectiveness of supplier controls, and the ability of manufacturers to demonstrate compliance with European legislation.



The challenge extends far beyond regulatory compliance. Brand owners, retailers, distributors and procurement organisations increasingly require objective product-level evidence to demonstrate that PFAS-related requirements are consistently met. While supplier declarations remain an important part of supply chain management, they do not necessarily reflect the actual chemical status of the market-ready product. Independent product-level testing closes this verification gap by assessing what is actually placed on the market.



The investigation analysed 18 textile and footwear products purchased through the German SHEIN platform and tested them for multiple groups of hazardous substances using accredited laboratory methods.



The investigation addressed a simple but increasingly important question: Do products currently placed on the European market comply with applicable chemical legislation?



The findings demonstrate that compliance cannot always be assumed and reinforce the growing importance of independent product-level verification as part of modern supply chain and compliance management.

THE SHEIN INVESTIGATION

Key Findings of the Investigation

The investigation reveals significant concerns regarding chemical compliance in products placed on the European market.

83%

of products contained problematic chemicals

40%

exceeded applicable limits under the European REACH or POP Regulations

75%

of the products tested for PFAS exceeded applicable legal limits

>12,000×

highest PFAS exceedance

One children's waterproof jacket exceeded the applicable PFAS limit by more than 12,000 times. While this represents an individual finding, it illustrates why independent laboratory verification is becoming increasingly important for manufacturers, retailers and brand owners seeking to minimise regulatory and commercial risks.

179×

highest DEHP exceedance

Source: Deutsche Umwelthilfe (DUH), independent laboratory investigation of textile and footwear products, 2025/2026.

FROM PFAS AWARENESS TO VERIFIED PFAS COMPLIANCE

The textile industry is moving from PFAS awareness to PFAS accountability

PFAS are under increasing scrutiny. Expectations from consumers, retailers and regulators are converging - making certified evidence more important than ever. Independent product-level evidence closes the gap between supplier documentation and the market-ready product.



Consumer Awareness



Retailer Requirements



Regulation



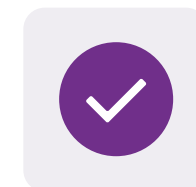
Independent Verification



Market Trust

PFAS, commonly referred to as 'forever chemicals', are highly persistent synthetic substances widely used for water, oil and stain repellency. Because they do not readily degrade, PFAS accumulate in the environment and have been linked to numerous health concerns. Historically, the textile industry has represented one of Europe's largest applications for PFAS.

PFAS-Free is rapidly moving from a voluntary sustainability topic to a compliance, market access and communication requirement. Across textiles, packaging, consumer goods, cosmetics and industrial applications, companies increasingly need credible evidence that connects supply-chain documentation with the actual chemical status of the product.



**VERIFIED EVIDENCE
CLOSES THE GAP**

between supplier declarations
and market-ready products.

FROM PFAS AWARENESS TO VERIFIED PFAS COMPLIANCE

PFAS-Free is Relevant Across Multiple Industries

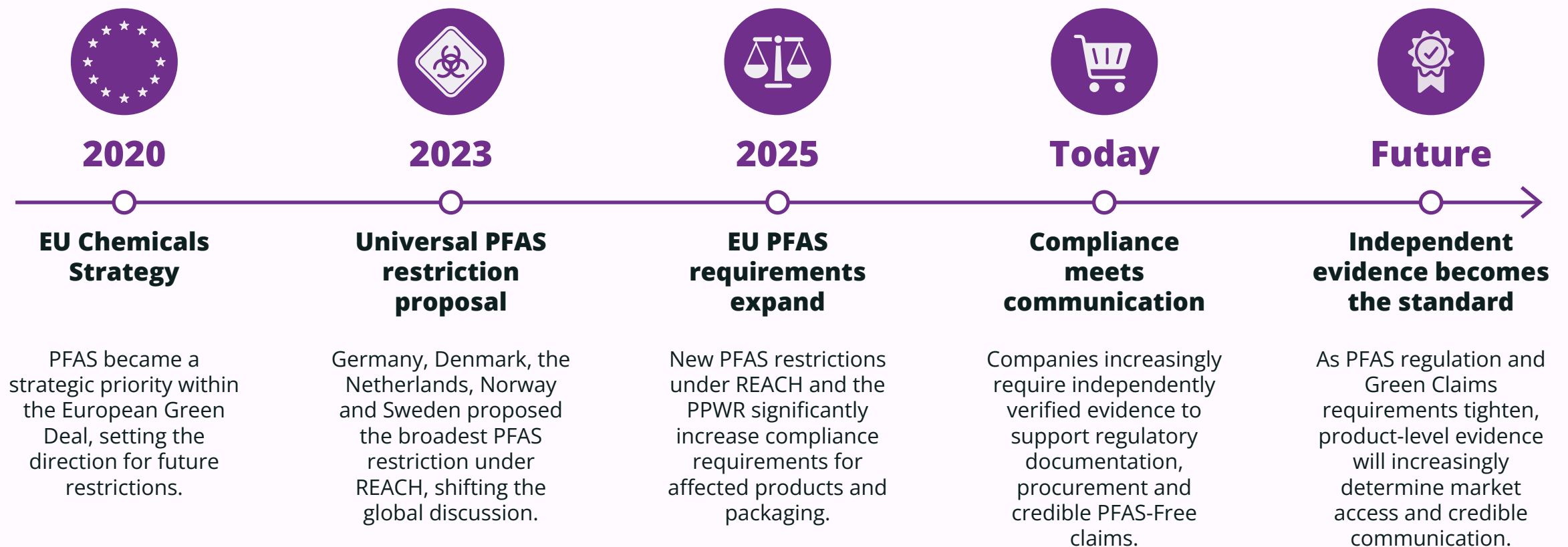
As regulatory and market expectations evolve, companies are increasingly expected to demonstrate compliance through credible, independent evidence.

INDUSTRY	TYPICAL PFAS APPLICATIONS	WHY IT MATTERS
 Textile	Waterproof clothing, footwear	REACH & market access
 Food Packaging	Wrappers, cups, takeaway	PPWR & food-contact compliance
 Consumer Goods	Kitchenware, furniture	REACH & retailer requirements
 Cosmetics	Make-up, skincare	REACH & credible product claims
 Fire Protection	Fire-fighting foams	REACH restrictions & phase-out
 Industrial Applications	Technical textiles, PPE	Supply-chain compliance & substitution

THE PFAS JOURNEY - KEY MILESTONES

A Clear Shift Towards PFAS-Free Products and Verified Claims

The transition towards PFAS-Free products has been shaped by scientific progress, evolving regulation and changing market expectations. Together, these developments are transforming how companies manage chemical compliance and communicate PFAS-Free claims.



FROM REGULATORY PRESSURE TO MARKET EXPECTATIONS

PFAS Is No Longer Only A Chemical Issue

It has become a strategic business, compliance and market access issue.

The implications of PFAS extend far beyond regulatory compliance. Retailers are strengthening supplier requirements, procurement organisations increasingly request objective product-level evidence, consumers expect greater transparency, and authorities continue expanding market surveillance. At the same time, environmental product claims are subject to increasing regulatory scrutiny. Together, these developments make independent evidence relevant at three levels: regulatory compliance, market access and credible PFAS-Free communication.

From Claims to Credible Evidence

YESTERDAY

Supplier Declaration



Marketing Claim



Limited Verification

TODAY

Document Review



Testing & Conformity Assessment



Certified Evidence



Credible PFAS-Free Communication



Document Review

Product documentation and relevant supply chain information are reviewed against the certification requirements.



Independent Laboratory testing

Accredited laboratories analyse representative product samples using recognised analytical methods.



Conformity Assessment

Certification bodies evaluate the combined documentary and laboratory evidence against the defined certification criteria.



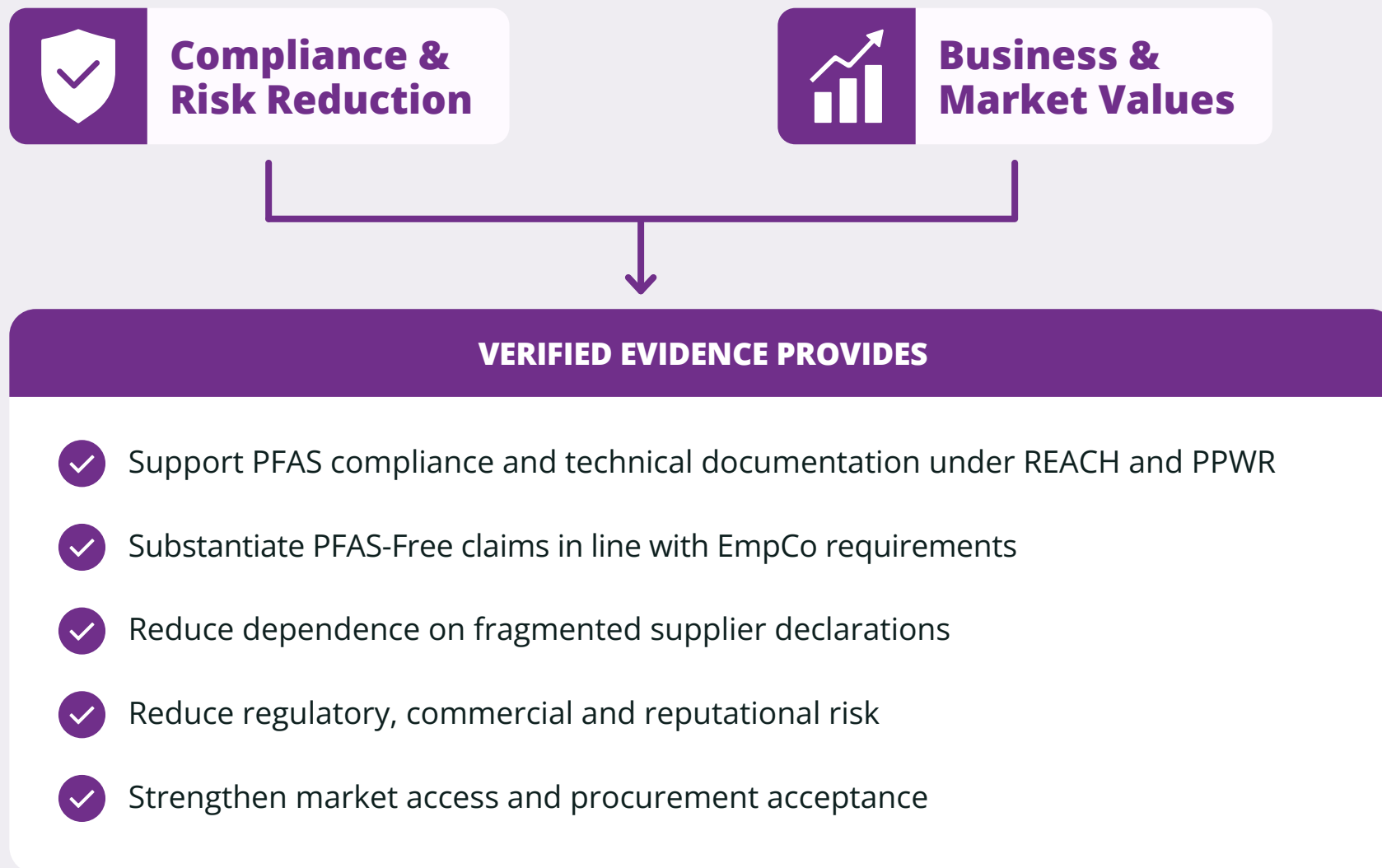
Certified Evidence

The result is independent, product-level evidence that supports credible PFAS-Free communication.

BUSINESS BENEFITS

Why Verified Evidence Creates Business Value

As PFAS-Free products become more common, competitive advantage will increasingly depend on the ability to demonstrate compliance through credible, independently certified evidence.



WHAT COMPANIES SHOULD DO NOW

- ! Define the product or material to be certified
- ! Identify relevant PFAS risks
- ! Test the product independently
- ! Obtain third-party certification

THE SOLUTION

flustix PFAS-FREE Independent Certification



flustix PFAS-FREE combines product-level testing, regulatory evidence and independent certification in one structured process. From raw materials and semi-finished goods through to the market-ready end product, certification is applied where robust PFAS evidence is actually needed.



The programme combines document review, accredited laboratory testing and independent conformity assessment. It supports companies in addressing applicable PFAS requirements under REACH and PPWR while providing the substantiated evidence required for credible PFAS-Free communication under EmpCo.



The result is not simply a laboratory report, but independently certified and publicly verifiable product-level evidence.

OUR CERTIFICATION APPROACH



DOCUMENT REVIEW

Evaluation of product documentation and relevant supply chain information.



INDEPENDENT LABORATORY TESTING

Accredited laboratories test representative product samples.



IMPARTIAL CONFORMITY ASSESSMENT

Certification bodies assess evidence against defined PFAS-FREE certification requirements.

THE flustix TRUSTMARK FAMILY

The PFAS-FREE Trustmarks

PFAS-FREE Total Product

When both the product or product content and the retail packaging are PFAS-FREE. Supports companies in demonstrating compliance with REACH and PPWR while enabling substantiated Green Claims communication under EmpCo.

Suitable for:

Packaged consumer goods, consumer products, complete products



PFAS-FREE Packaging

For packaging and packaging materials with independently verified PFAS-free status. Supports companies in demonstrating compliance with applicable PPWR requirements and communicating PFAS-Free product claims transparently.

Suitable for:

Paper and board packaging, films, pouches, primary, secondary and transport packaging



PFAS-FREE Product

For solid products, materials and components with independently verified PFAS-free status. Supports REACH-related evidence and substantiated Green Claims communication under EmpCo.

Suitable for:

Consumer products, textiles, components, semi-finished products, raw materials



PFAS-FREE Product Content

For liquid, paste, gel and powder formulations with independently verified PFAS-free status. Particularly suitable for REACH-relevant product categories and transparent product communication.

Suitable for:

Cosmetics, personal care products, detergents, food and food supplements, paints, coatings, adhesives and other formulations



KEY TAKEAWAYS

What Matters Most For Credible PFAS-FREE Communication

Independent verification delivers the clarity, confidence and credibility companies need to navigate regulatory requirements and meet growing market expectations.



Compliance

Product-level evidence supports regulatory documentation under applicable PFAS requirements.



Market Access

Independent certification strengthens acceptance across procurement, retail and international supply chains.



Verified Evidence

Testing the actual product closes the gap between supplier declarations and market-ready reality.



Customer Trust

Third-party certification makes an invisible product characteristic understandable and credible.



Independent Certification

Substantiated certification supports PFAS-Free claims under evolving Green Claims and EmpCo requirements.

REFERENCES

Leading brands worldwide trust flustix

adapa

HOMANN

smol

tesa

FABER-CASTELL
since 1761

GROPPER
QUALITÄT & IDEEN SEIT 1929

Azul
Linhas Aéreas Brasileiras

Kneipp

SunChemical
a member of the DIC group
Color & Comfort



Emirates

Henkel

Sowinpak

VERMOP
PROFESSIONAL CLEANING SYSTEMS

RAGALLER

Lufthansa

APP
sinarmas

K'ARCHER

DEISS

Ad Terram

traceless

delo

CORN NEXT

GREEN ROCK
GROUP

SURTECO

DeliPac

DELTA

COPECTO
DO GOOD USE WOOD

SWISS

DUNI
GROUP

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Eurowings



elif
Packaging for Life
A Huhtamaki Company

lido

rkW
WHEN EXCELLENCE
MATTERS

DG nexolution

FOOTPRINT

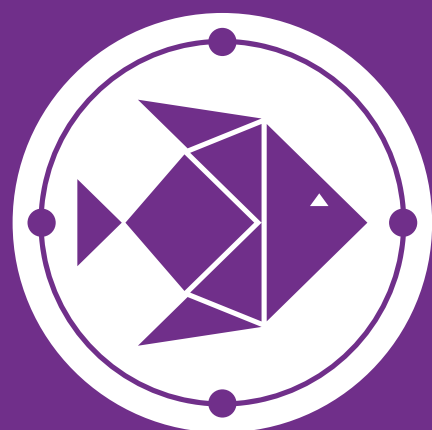
LECTA

TranscendPackaging

sunp.r
EPS and more...

YOM

And many more...



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CONTACT

Ready to Turn Evidence into action?

Whether you are a raw material supplier, manufacturer, brand owner or retailer, flustix provides a structured route from PFAS testing to independent certification – from materials and semi-finished goods through to the market-ready end product.

Create robust regulatory evidence, strengthen market access and communicate PFAS-Free claims credibly across international markets.

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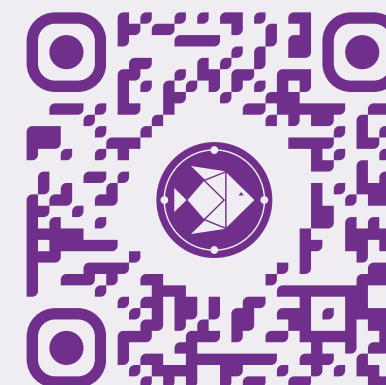
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BOOK A FREE PFAS CERTIFICATION CONSULTATION

Our team is ready to support you with information, guidance and a customised certification solution for your products.



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